

Draft Waste Incidental to Reprocessing Evaluation for Closure of Waste Management Area C at the Hanford Site

Hanford
Fact Sheet



Overview

The U.S. Department of Energy (DOE) is holding a public information meeting on its Draft Waste Incidental to Reprocessing (WIR) Evaluation for Closure of Waste Management Area C (WMA C) (Draft WIR Evaluation). WMA C (also referred to as "C Tank Farm") is in the central part of the 580-square-mile Hanford Site, which is located in southeastern Washington state.

The Draft WIR Evaluation is an important step toward closure of the 16 single-shell tanks (SSTs) in WMA C. C Tank Farm is one of Hanford's 18 tank farms which, together, have a total of 177 underground tanks. DOE has retrieved more than 1.7 million gallons of waste from the tanks in WMA C (approximately 96 percent of the waste volume and key radionuclides) and transferred it to newer double-shell tanks. Closing these SSTs will be a significant achievement in the Hanford cleanup mission.

The Draft WIR Evaluation would, if finalized, provide the basis for a WIR determination that the residual waste remaining in the WMA C tanks can be managed as low-level waste. A WIR determination would be the first step in a regulatory process that involves filling the tanks with a concrete-like grout, placing an engineered surface barrier above them and their ancillary structures (e.g., transfer piping), and monitoring WMA C to ensure the integrity of the barrier and the tanks.

DOE announced this approach to closing WMA C in its 2013 Record of Decision for the Final Tank Closure and Waste Management Environmental Impact Statement. This approach to closing WMA C would require a WIR determination and a RCRA permit from the Washington Department of Ecology (Ecology).

DOE Authority to Make WIR Determinations

DOE's regulatory authority to determine whether radioactive waste that was once managed as high-level waste may be managed as low-level radioactive waste comes from the Atomic Energy Act of 1954. DOE's procedures for exercising this authority are found in DOE Order 435.1, Radioactive Waste Management, and its implementing manual. This Order establishes the requirements for management of all radioactive waste at DOE facilities.

HOW CAN YOU GET INVOLVED?

There are several opportunities to learn more about the purpose, scope, and process for the Draft WIR Evaluation

- (1) Review the Draft WIR Evaluation online at: www.hanford.gov/page.cfm/WasteManagementAreaC
- (2) Attend a public meeting. Presenters from DOE headquarters, the Office of River Protection, and the National Regulatory Commission (NRC) will provide briefings.

Meeting Information:

DOE responds to NRC's Request for Additional Information

Tuesday, Oct. 29
6:00 – 8:00 p.m.
Best Western Plus

1515 George Washington Way
Richland, WA 99354

QUESTIONS?

Rod Lobos, DOE
WMACDRAFTWIR@rl.gov



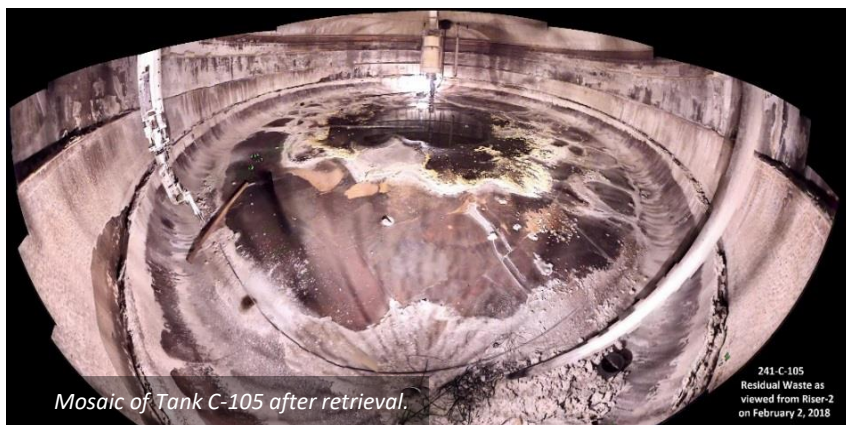
U.S. DEPARTMENT OF ENERGY



DRAFT WASTE INCIDENTAL TO REPROCESSING EVALUATION FOR CLOSURE OF C TANK FARM

DOE Authority to Make WIR Determinations (cont.)

Among the Order's requirements are those which govern the management of waste based on its risk and disposal requirements. Pursuant to federal law that applies to DOE facilities in South Carolina and Idaho, DOE has successfully closed emptied underground waste tanks that once held reprocessing waste at the Savannah River Site and the Idaho National Laboratory. The process DOE used at those sites is analogous to the process that applies to Hanford, as outlined in DOE Order 435.1 and its implementing manual.



Role of the Nuclear Regulatory Commission

DOE has asked the NRC to perform a technical peer review of DOE's Draft WIR Evaluation. NRC has been reviewing the Draft WIR Evaluation and will provide a Technical Evaluation Report. DOE will consider NRC's technical review before deciding whether to issue a final WIR Evaluation. Following consultation with the NRC and consideration of comments from stakeholders, Tribal Nations, and the public, DOE anticipates issuing a final WIR Evaluation in mid-2020.

Additional Regulatory Requirements for Closing WMA C

A WIR Determination only addresses management of radionuclides in the residual waste that remains in the tanks and their auxiliary structures in WMA C. Because the residual waste is mixed waste (radioactive and hazardous), DOE must also meet Washington State's dangerous waste requirements (Washington Administrative Code [WAC] 173-303, "Dangerous Waste Regulations") when making closure decisions for WMA C.

Pursuant to the Tri-Party Agreement, closure plans must be approved by Ecology and incorporated into the Hanford Site-Wide Dangerous Waste Permit before DOE can proceed with closing the tanks. Modification of this permit will require a separate public comment process and other proceedings.

For more information on the Draft WIR Evaluation, please visit: <https://www.hanford.gov/page.cfm/WasteManagementAreaC>



FREQUENTLY ASKED QUESTIONS (FAQs)

Q: Has DOE conducted a WIR evaluation at Hanford or other sites?

A: Yes. At Hanford, DOE completed a DOE Order 435.1 WIR evaluation and determination regarding the disposal of three gallons of low-activity tank waste as part of a treatability test in 2017. DOE has completed WIR evaluations and determinations at sites in New York, South Carolina and Idaho.

Q: What does the draft WIR Evaluation show in terms of worker and public safety?

A: It shows that the proposed approach to closing WMA C – stabilizing the tanks and their auxiliary structures with a concrete-like grout and placing an engineered surface barrier above them – would protect workers, the public, and the environment, as the small amount of residual waste in the tanks, once stabilized with grout and covered by a surface barrier, would not pose a significant threat.

Q: What is the Performance Assessment (PA)?

A: The PA is an analysis used to estimate the impacts that stabilized residual waste might have over the next 1,000 years (and beyond). The PA uses detailed analytical models to predict the fate and transport of radionuclides in the stabilized residuals. The analytical results inform DOE about the anticipated risks associated with the closure of WMA C. The PA provides the technical basis for the draft WIR evaluation, as well as a variety of other closure-related documents, corrective measures, and regulatory approvals necessary to close WMA C.

Q: How will cleanup decisions be made for soils and groundwater?

A: The WIR evaluation only addresses DOE's management of radionuclides in residual waste in the C Farm tanks. Contaminants in soil and groundwater will be addressed under separate regulatory processes. Decisions made under those processes will be subject to public review and regulatory agency approval.

